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**Subject:** RE: Proposed Soil Remedy RD/RA Calls with FMC  
**Date:** Monday, February 22, 2016 6:41:11 AM

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My opinion on the question about radon mitigation and other gases:

I think that (1) yes, FMC should use radon resistant design to address RAO #1 and (2)no, using radon resistant design will not by itself address other gases. In particular, post construction monitoring for gases of concern should still be included.

Guidance for radon resistant construction can be found in **Radon Prevention in the Design and Construction of Schools and Other Large Buildings, EPA /625/R-92-016, June 1994.**

RAO number 1 addresses prevention of radon inhalation in potential future buildings. Typically this is achieved by requiring radon resistant construction techniques which act to keep radon gas from entering buildings from soil. Radon guidance and radon resistant construction methods are technology driven rather than risk-based. They recognize that all ambient air and therefore all buildings have some level of radon. Radon resistant construction techniques are designed to generally keep indoor radon levels below the EPA radon guidance level of 4 pCi/l, which is itself a level that is based on what is practical.

Radon resistant construction techniques may include both active and passive systems, and as such will require ongoing maintenance that needs to be incorporated into OM&M plans.

Radon resistant construction should also help reduce indoor exposures to other gases. But because radon resistant construction is technology-based and specific to radon exposures, it is not clear that it is adequate by itself to address exposure concerns from other gases.

It should be noted that EPA radon guidance still recommends post-construction radon monitoring even if radon resistant construction techniques have been used. If other gases are of concern, contaminant-specific monitoring of indoor spaces is therefore still indicated for those gases as well.

Richard W. Poeton

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**From:** Williams, Jonathan [<mailto:Williams.Jonathan@epa.gov>]

**Sent:** Friday, February 19, 2016 4:04 PM

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**Subject:** RE: Proposed Soil Remedy RD/RA Calls with FMC

Rick and others:

I received a brief call from Marjo earlier today. FMC is thinking that installation of Radon mitigation systems in the planned RA-G North buildings will meet RAO #1 (see page 36 of the IRODA) and also address any other subsurface gases which might underlie those buildings when constructed. She asked us to consider that approach prior to our teleconference next Tuesday. Thanks.

Jonathan Williams, LHG

Remedial Project Manager

U.S. Environmental Protection Agency

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**From:** (b)(6)

**Sent:** Thursday, February 18, 2016 4:15 PM

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**Subject:** RE: Proposed Soil Remedy RD/RA Calls with FMC

I am available both days. Just send me the details.

Thanks.

Richard W. Poeton

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**From:** Williams, Jonathan [<mailto:Williams.Jonathan@epa.gov>]

**Sent:** Thursday, February 18, 2016 7:12 PM

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[Douglas.Tanner@deq.idaho.gov](mailto:Douglas.Tanner@deq.idaho.gov); Benchouk, Michele [USA] (b)(6) McDonnell, Kimberlee

**Subject:** Proposed Soil Remedy RD/RA Calls with FMC

FMC has proposed a couple of conference calls with EPA, IDEQ, and the Tribes to discuss EPA comments of 2/6/16 on the soil remedy RD/RA deliverables. The intent is to hear how FMC plans to revise deliverables in response to EPA comments, and provide feedback needed to help FMC develop high-quality resubmittals.

Please alert me about your availability on the follow days. Thanks.

Friday, Feb. 19 to discuss gas monitoring plan comments

Tuesday, Feb. 23 to discuss construction sequencing, PSVP and OMM&P comments

Jonathan Williams, LHG

Remedial Project Manager

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